

Work Order ID 72638

Wednesday, August 03, 2011 12:56:34 PM



Page 1

Item ID: D2580-1

Accept



Setup Start



Revision ID:

Stop



Item Name: 205 Skidtube bent detail

Start Date: 8/3/2011 Start Qty: 2.00



Cust Item ID:

Required Date: 8/10/2011 Req'd Qty: 2.00

Customer:

Reference:

Approvals:

Process Plan:

Date: 11-08-3

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop



Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

Draw Nbr

Revision Nbr

D2580

RevD DEO-D1

0.00

0.00



Skidtubes

Skidtubes

→ Chem Conv

Memo

1- Inspect mat'l D2500-1-190 for damage.

2-Drill pilot holes using drill jig DT 8149 (Do not use cutting fluid)

3-Open holes to 0.500" as per Dwg D2580 without cutting fluid

4-Deburr holes per QSI002 section 4.2.3 and blow out all chips from inside of tube

5-Chemical Conversion Coat as per QSI 005 4.1

6-Bond web in place per QSI 015.

□□

A/R Sikaflex-291 batch: 117516 □□□

Sikaflex expire date: 12/31/15

Start time and date: 11/08/08 bond for 12hrs

11.00

TW 11-08-05

AL 11/00/00

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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Page 2

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Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
101 	QC6- Inspect dimensions to drawing	0.00				2	0		BEN/08/09
QC Quality Control	Memo	0.00							
130 	QC3- Inspect Part Finish	0.00				2	0		BEN/08/09
QC Quality Control	Memo	0.00							
140 	Identify as per dwg & Stock Location: <u>LG</u>	0.00				2	0		BEN/08/09
Packaging Packaging	Memo	0.00							

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Page 3

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Cust Item ID:

Required Date: 8/10/2011 Req'd Qty: 2.00



Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

150

QC21- Final Inspection - Work Order Release

0.00



QC

Memo

0.00

Quality Control

OK 11/08/09

1108-9
②

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Picklist Print

Wednesday, August 03, 2011 12:56:40 PM

Page 1

Work Order ID: 72638

Parent Item: D2580-1

Parent Item Name: 205 Skidtube bent detail



Start Date: 8/3/2011

Required Date: 8/10/2011

Start Qty: 2.00

Required Qty: 2.00

Comments: IPP B01.11.08 Revised Step 9, 10, 12, and 13 SM 10.12.01 as per DEO D1 DD verf:ec IPP Rev:C

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D2500-1-190 		Manufactured	No			100	Each	41.0000	1	2			

Ext'n - 'I' Beam Tube 4"

Location

Loc Qty

Loc Code

LG

41

66296

41

D2596

Manufactured No

100

Each

0.0000

1



Web, 205 Skidtube

8 72575

(2)

JW 11-08-05

(2)

oh
11/08/08

W/O:		WORK ORDER CHANGES					
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DART

DESIGN <i>[Signature]</i>	DRAWN BY <i>[Signature]</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>[Signature]</i>	APPROVED <i>[Signature]</i>	DRAWING NO. D2580	REV. 0 SHEET 1 OF 3
DATE 07.02.27		TITLE 205 SKIDTUBE ASSEMBLY SCALE NTS	
A	96.09.16	NEW ISSUE	
B	96.12.02	AS MANUFACTURED	
C	98.08.26	REDRAWN, INCLUDED DEO 9094/9097	
D	07.02.27	CHANGE TO SS WEARPLATES AND GASKETS, INCLUDE DEO 9124/9183	

RELEASED
07.06.28 *[Signature]***DEO ATTACHED****UNDER REVIEW***P110670*RMV *P110670*

QTY -041	QTY -045	Part Number	Description
X		D2580-041	SKIDTUBE ASSEMBLY
	X	D2580-045	SKIDTUBE ASSEMBLY
1	1	D2500-1-190	EXTRUSION
1	1	D2576-3	STEP
20	24	D2579	CROSS BOLT SPACER
16	16	D2594-1	PLUG
16	16	D2594-3	O-RING
1	1	D2596	205 WEB
1	1	D2855	AFT CAP
1	1	D3564-5	WEARSHOE
1	1	D3564-9	WEARSHOE
1	1	D3564-11	WEARSHOE
1	1	D3564-13	WEARSHOE
2	2	D3566-1	GASKET
1	1	D3566-5	GASKET
1	1	D3566-13	GASKET
50	50	ALS7-1032-130 or AKS7-1032-130 or AKS4-1032-130 or AELS-1032-130	INSERT
50	50	AN3C4A	BOLT
2	2	AN3-5A	BOLT
50	50	AN960C10L	WASHER
2	2	AN960JD10L	WASHER

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. *20638***GENERAL NOTES:**

- 1) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 2) ALL DIMENSIONS ARE IN INCHES
- 3) INSERT D2596 WEB TO LOCATION SHOWN OFF AFT END OF SKIDTUBE AND BOND WEB INTO OUTER TUBE WITH NON-STRUCTURAL SIKAFLEX-241 ADHESIVE PER DART QSI 015 BEFORE BENDING. ENSURE HOLES LINE-UP.
- 4) BEND AS A SMOOTH RADIUS STARTING WITH A MAXIMUM CENTERLINE RADIUS OF 60 AND ENDING WITH A MINIMUM RADIUS OF 30. A MAXIMUM REDUCTION OF 0.200 IN DIAMETER IS ALLOWABLE IN THE BENT PORTION OF THE TUBE.
- 5) USE DART DRILL TEMPLATE TD2577-205 TO LOCATE AND DRILL Ø0.297 HOLES FOR WEARSHOE INSERTS. INSTALL ALS7-1032-130 PER SECTION D-D (50 PLACES) AFTER FINISH. INSTALL AN3C4A BOLTS AND AN960C10L WASHERS WITH SIKAFLEX-241/-291.
- 6) WELDING TO BE DONE PER DART QSI 004.
- 7) FINISH:
SEE NOTES ON
PAGE 2 FOR D2580-041 AND
PAGE 3 FOR D2580-045
- 8) INSERT D2594-1 PLUG C/W D2594-3 O-RING IN HOLES MARKED 'P' (BOTH SIDES OF TUBE) AFTER FINISH (16 PLACES).

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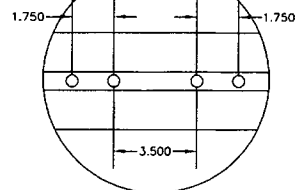
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Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

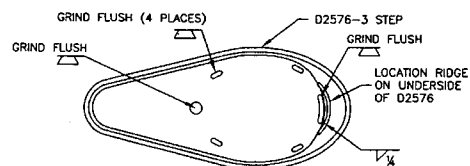
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NOTE: Date & initial all entries

SCALE 5:24



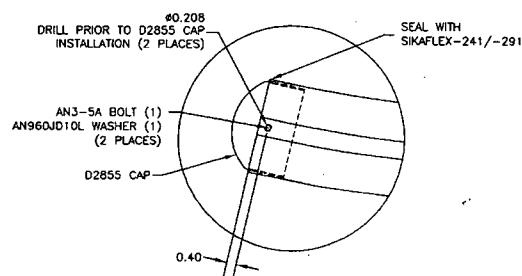
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07-06-28

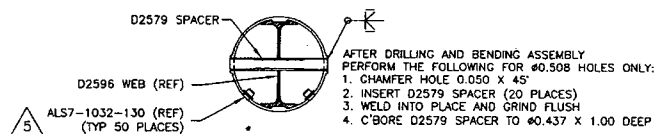
~~DEO ATTACHED~~

RmV 411.06.30



DETAIL C
SCALE 5:24

SECTION D-D
SCALE 5:24

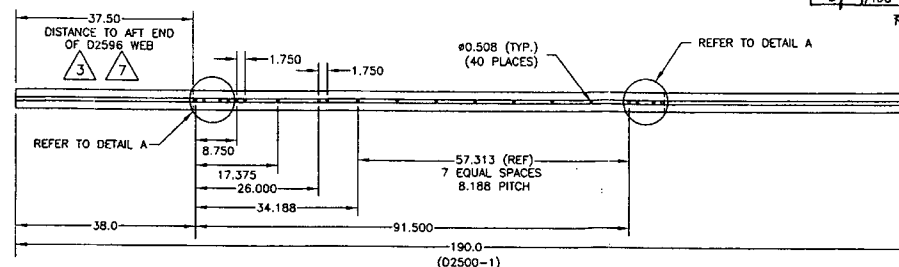


१५३५

D2580-041 NOTES

- i) FINISH: ACID ETCH, ALODINE PER DART QSI 005 4.1 PRIOR TO INSERTING D2596 WEB POWDER COAT ASSEMBLY GLOSS WHITE (REF. 4.3.5.1) PER DART QSI 005 4.3 BLACK ANTI-SKID PAINT AS INDICATED PER DART QSI 005 4.4

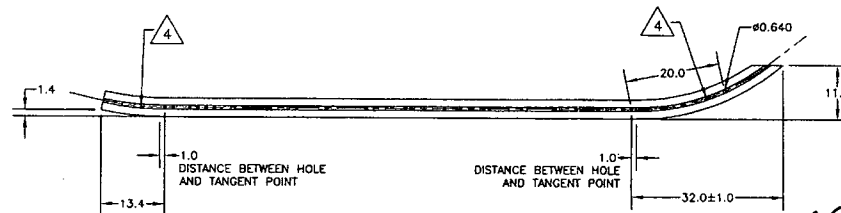
D2580-1 DRILLING DETAIL



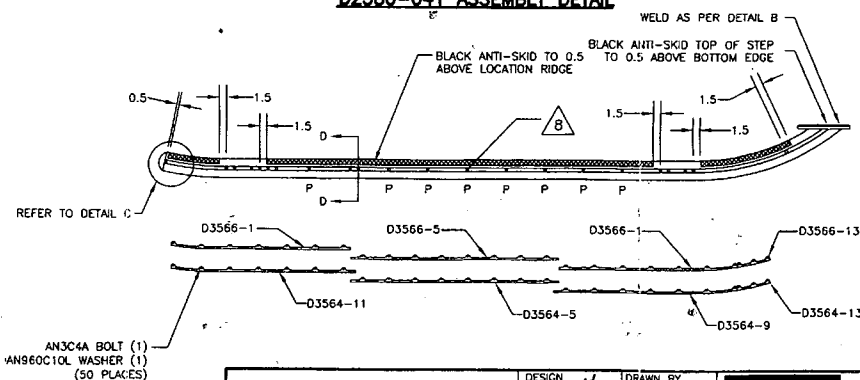
~~UNDER REVIEW~~

RMV 911063

D2580-1 BENDING AND CUTTING DETAIL



D2580-041 ASSEMBLY DETAIL



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CHECKED _____

APPROVED

DATE _____

DART DART AEROSPACE LTD.
LAWRENCEVILLE, ONTARIO, CANADA

	DRAWING NO
--	------------

TITLE	205 SKIDTUBE ASSEMBLY
-------	-----------------------

REV. D

SCALE

1:24

W/O:		WORK ORDER CHANGES					
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RELEASED
07-06-78

~~DEO ATTACHED~~

Technical drawing of a circular component with mounting holes and dimensions. The drawing includes the following labels and dimensions:

- DRILL PRIOR TO D2855 CAP INSTALLATION (2 PLACES)
- SEAL WITH SIKAFLEX-241/-291
- AN3-5A BOLT (1)
- AN960UD10L WASHER (1) (2 PLACES)
- SEE NOTE ii)
- D2855 CAP
- 0.40

D2579 SPACER

D2596 WEB (REF)

ALS7-1032-130 (REF)
(TYP 50 PLACES)

AFTER PERFORM

1. CHA
2. INS
3. WEI
4. C'B

AFTER DRILLING AND BENDING ASSEMBLY
PERFORM THE FOLLOWING FOR Ø0.508 HOLES ONLY:

1. CHAMFER HOLE 0.050 X 45°
2. INSERT D2579 SPACER (20 PLACES)
3. WELD INTO PLACE AND GRIND FLUSH
4. C'BORE D2579 SPACER TO Ø0.437 X 1.00 DEEP

i) FINISH: ACID ETCH, ALODINE PER DART QSI 005 4.1 PRIOR TO INSERTING D2596 WEB
POWDER COAT ENTIRE ASSEMBLY GREEN (REF. 4.3.5.8) PER DART QSI 005 4.3
BLACK ANTI-SKID PAINT AS INDICATED PER DART QSI 005 4.4

ii) IT IS ACCEPTABLE TO GRIND A RELIEF IN THE D2855 AFT CAP TO PREVENT INTERFERENCE
WITH THE SPACER AT THIS LOCATION

[illegible]

Figure 1: Elevation view of the bridge deck showing dimensions and hole locations. The diagram includes a cross-section of the bridge deck with various dimensions and labels. Key dimensions include: 5.985 (height of the deck edge), 1.4 (height of the deck edge), 5.338 (REF) (height of the deck edge), 51.340 (total length), 39.580 (length of the hole area), 5.915 (height of the deck edge), 3.630 (REF) (height of the deck edge), 0.508 (8 PLACES) (height of the hole area), 20.0 (width of the hole area), 0.640 (width of the hole area), 1.0 (DISTANCE BETWEEN HOLE AND TANGENT POINT), 13.4 (width of the hole area), and 32.0 ± 1.0 (width of the hole area). The diagram also shows a cross-section of the bridge deck with a hole and a tangent point.

WELD AS PER DETAIL F

BLACK ANTI-SKID TO 0.5 ABOVE LOCATION RIDGE

BLACK ANTI-SKID TOP OF STEP TO 0.5 ABOVE BOTTOM EDGE

NO C'BORE NO PLUG

NO C'BORE NO PLUG

NO C'BORE NO PLUG

NO C'BORE NO PLUG

D3566-1

D3566-5

D3566-1

D3566-13

D3564-11

D3564-5

D3564-9

D3564-1


AN3C4A BOLT (1)

AN960C10L WASHER (1)

(50 PLACES)

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CHECKED <i>HA</i>	APPROVED <i>HA</i>		
DATE 07.02.27		DRAWING NO. D2580	REV. D SHEET 3 OF 3
TITLE 205 SKIDTUBE ASSEMBLY		SCALE 1:24	

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